20. A contact lens material according to claim 19 wherein X has the general formula IVB, IVC, IVD, IVE or IVF

wherein a group IVB has the formula

wherein the groups R^6 are the same or different and each is hydrogen or C_{1-4} alkyl and d is from 2 to 4,

the group IVC has the formula

$$-O - P - O(CH_2)_e - N (R^7)_3$$
 (IVC)

wherein the groups R^7 are the same or different and each is hydrogen or C_{1-4} alkyl, and e is 1, 3 or 4;

groups of formula (IVD) have the general formula

$$\begin{array}{c|c}
CH_{2}-O-P-O-(CH_{2})_{f} \stackrel{\bigoplus}{\longrightarrow} N(R^{8})_{3} \\
-[O]_{z}-CH \qquad O \\
CH_{2}-O-C-B^{1}-CH_{3}
\end{array}$$
(IVD)

wherein the groups R^8 are the same or different and each is hydrogen or C_{1-4} alkyl, B^1 is a valence bond or straight or branched alkylene, oxaalkylene or oligo-oxaalkylene group, f is from

THIRD PRELIMINARY AMENDMENT U.S. Appln. No. 10/084,062

1 to 4 and if B is other than a valence bond, z is 1 and if B is a valence bond z is 0 if X is directly bonded to an oxygen or nitrogen atom and otherwise z is 1;

groups of formula (IVE) have the general formula

$$-[O]_{z}-CH_{2}-CH-CH_{2}-O-P-O-(CH_{2})_{g} \xrightarrow{\bigoplus} N(R^{9})_{3}$$

$$O-C-B^{2}-CH_{3}$$

$$O$$
(IVE)

wherein the groups R^9 are the same or different and each is hydrogen or C_{1-4} alkyl, B^2 is a valence bond or straight or branched alkylene, oxaalkylene or oligo-oxaalkylene group, g is from 1 to 4 and if B is other than a valence bond, z is 1 and if B is a valence bond z is 0 if X is directly bonded to an oxygen or nitrogen atom and otherwise z is 1; and

groups of formula (IVF) have the general formula

$$\begin{array}{c} O \\ | \\ CH_{3} - B^{3} - C - O - CH_{2} & O \\ | & | \\ CH - O - P - O - (CH_{2})_{h} \stackrel{\oplus}{N} (R^{10})_{3} \\ | & | \\ -[O]_{z} - CH_{2} & O \end{array}$$
 (IVF)

wherein the groups R^{10} are the same or different and each is hydrogen or C_{1-4} alkyl, B^3 is a valence bond or a straight or branched alkylene, oxaalkylene or oligo-oxaalkylene group, h is from 1 to 4 if B is other than a valence bond, z is 1 and if B is a valence bond z is 0 if X is directly bonded to an oxygen or nitrogen atom and otherwise z is 1.

^{24.} A contact lens material according to claim 17 wherein the zwitterionic monomer has the formula (V):

THIRD PRELIMINARY AMENDMENT U.S. Appln. No. 10/084,062

$$CH_2 = C - C - C - C - (BB)_{nn} - YY$$
 (V)

Cont.

wherein BB is a straight or branched C₁-C₆ alkylene chain optionally interrupted by one or more oxygen atoms;

nn is from 1 to 12;

R¹¹ is H or a C₁-C₄ alkyl group; and

YY is a zwitterionic group.

30. A contact lens formed of a hydrogel comprising a cross-linked polymer formed by polymerization of a mixture of:



- a) a zwitterionic monomer;
- b) a non-ionic diluent monomer;
- c) a cross-linking monomer which forms cross-linking during the polymerization reaction; and
 - d) water in an amount from 30 to 80% by weight.